K & M
Sprayed "Limpet" Asbestos

HAMILTON COMPANY, Inc.
4239 Lindell Boulevard
St. Louis, Missouri

A Modern Treatment for Correct Acoustics Hailed by Michigan Architects for Resistance to Fire, Light Weight, Insulation Value, Decorative Possibilities, Low Installation Cost

KEASBEY & MATTISON COMPANY AMBLER, PENNA.

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Material Unique for Sound Control

ACOUSTICAL materials have been divided customarily into two general classifications. Comprising the first group are the various types of tile units, which are attached to walls and ceilings by any of a number of methods. In the second category are the acoustical plasters and plastics which are applied to surfaces by means of a trowel.

A unique development in these materials, however, which combines the most desirable features of both groups, yet which cannot be classed in either, is the product known as Sprayed Limpet Asbestos. Outstanding attributes of this material are its capacity for effective and correct sound absorption, its light weight, its inherent characteristic of resistance to fire, its adaptability to painting, and the low cost involved in its installation.

In regard to the acoustical problem, this material has been found to possess the characteristics of high sound absorption and noise reduction that may be obtained with the most efficient varieties of tiling. At the same time, however, it boasts the added advantage of providing a continuous surface, unbroken by joints or seams, which simulates a textured plaster finish. This distinct attribute possesses a particular appeal to the architect.

Owing to the peculiar nature of its composition, Sprayed Limpet Asbestos does not depend on surface porosity for its ability to absorb sound. The underlying felt-like layer permits the surface to act as a modified diaphragm, which breaks up the sound waves. As a consequence of this, the material retains its marked acoustical efficiency even after the application of many coats of paint.

Laboratory tests have demonstrated that many coats of paint have no effect whatsoever upon the sound-absorbing coefficients of Limpet. Research conducted by the United States Bureau of Standards has showed that a layer of Sprayed Limpet, three quarters of an inch thick, applied to metal lath, provides a noise-reduction coefficient of .90, even when covered with ten coats of paint.

As the name implies, Limpet is applied to wall and ceiling surfaces by the spray method. This involves the use of an ingenious piece of machinery, especially designed for the purpose, which spreads the asbestos fiber, together with a certain percentage of special bonding material, in an even layer on the surface which is being treated. This procedure offers great benefits, particularly in connection with surfaces of irregular contour or outline. It is obvious that the application of Limpet to barreled ceilings, coves, panels, and arches is infinitely simpler than similar treatment which involves the use of prefabricated materials of the block or panel type.

Sprayed Limpet Asbestos beautifies the ceiling of the Cocktail Bar in the Governor Clinton Hotel, New York, while serving at the same time to reduce undesirable noise

Limpet will adhere to any surface, vertical or horizontal, whether it be of plaster, concrete, brick, wood, or glass. It may also be applied directly to metal lath.

The mechanism used in spraying Limpet Asbestos is so constructed that the asbestos fiber is fed out in a thoroughly willowed state—that is, the fibers are dry and well spread, so as to eliminate packing or bunching. A liquid spray in the form of a fine mist is combined with the fibers while they are in the air, so that they are dampened just as they strike the surface to which they are being applied.

This spraying process is continued until the thickness which is desired has been attained. The surface is then leveled off, and the particular surface texture desired is obtained by rolling and pressing the newly spread material. This unique process forms a felt coating which is extremely light in weight. A square foot of Limpet, one inch thick, weighs only twelve ounces. It is this lightness of weight that accounts in a large measure for its remarkable acoustical properties.

The material offers the possibilities for a variety of surface effects. It can be treated so as to produce anything from a smooth floated-plaster effect to a textured finish. A resemblance to stone may be obtained simply by scoring the surface while the Limpet layer is still in a moist state. On side walls it may be scored into blocks and tinted so as to simulate Travertine stone. Murals, stencils and other designs also may be executed to lend additional attractiveness to the paneling. For the proper decorative effect, painting is usually required, and can be done by any reliable painting contractor.

Fluffy Limpet Asbestos fibers are applied to ceiling or wall surfaces by a unique spraying process so as to form a continuous, uniform layer

Because this material is produced from specially prepared asbestos fiber and bonding material, it is naturally noncombustible. Also, while it is impossible to call a material which is so light and porous waterproof, Limpet is, nevertheless, highly resistant to moisture, and it is being used successfully in controlling excessive noise in swimming pools.

Limpet also provides unusually efficient thermal insulation. It has a thermal conductivity of .31 per inch of thickness at a temperature of 75 degrees Fahrenheit. It effectively insulates against the infiltration of outdoor summer heat and likewise prevents the loss of heat during the cold seasons. Seagoing vessels in particular value this additional property of Limpet, for it helps to maintain even temperatures whether the ship is sailing in Arctic or Equatorial waters. A testimonial to this attribute of the material is the fact that it is now in use on more than seventy American ships.

The materials which go into the composition of Limpet are selected and prepared with great care. The suitable fiber and binder for any particular application will depend upon the atmospheric conditions at the building site and the color and architectural effects desired.

Limpet has been used in acoustical treatment for many years in the United States and Europe as well as in South America, South Africa, India and Australia. In the United States it was first introduced in the larger eastern cities, but it is now available in the principal centers of the Middle West and on the Pacific Coast through contractors who maintain the necessary equipment for installation and the workmen trained in the technique of applying the material. In Detroit Limpet is sold and installed by the Contracting Sales Company, 600 Michigan Building.

Because it provides a sanitary and clean surface for interiors, Limpet has become popular in hospitals and clinics. Among these institutions where it has been installed are the Out Patient Clinic Building of the Medical College of Virginia, in Richmond, and the Jewish Memorial Hospital, in New York City.

Other representative installations include those at the Chrysler Automobile Salon in the Chrysler Building, New York City; the Union News Cafeteria, Radio City, New York; the Longchamps Restaurant, New York, and the Amherst (Mass.) College swimming pool.

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This wealth of manufacturing experience is your assurance of quality in all K&M products. Today K&M manufactures, in addition to Sprayed "Limpet," a complete line of Asbestos and Magnesia Insulations, Packings, Asbestos Textiles, Asbestos Paper, Asbestos Corrugated Sheets, Asbestos-Cement Roofing Shingles, Siding and Decorative Wallboards.

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